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# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE---SOIL CONSERVATION SERVICE  
and  
COLORADO AGRICULTURAL EXPERIMENT STATION  
STATE ENGINEER of COLORADO  
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF  
MAY 1, 1968



## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

### PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 Federal Office Building, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

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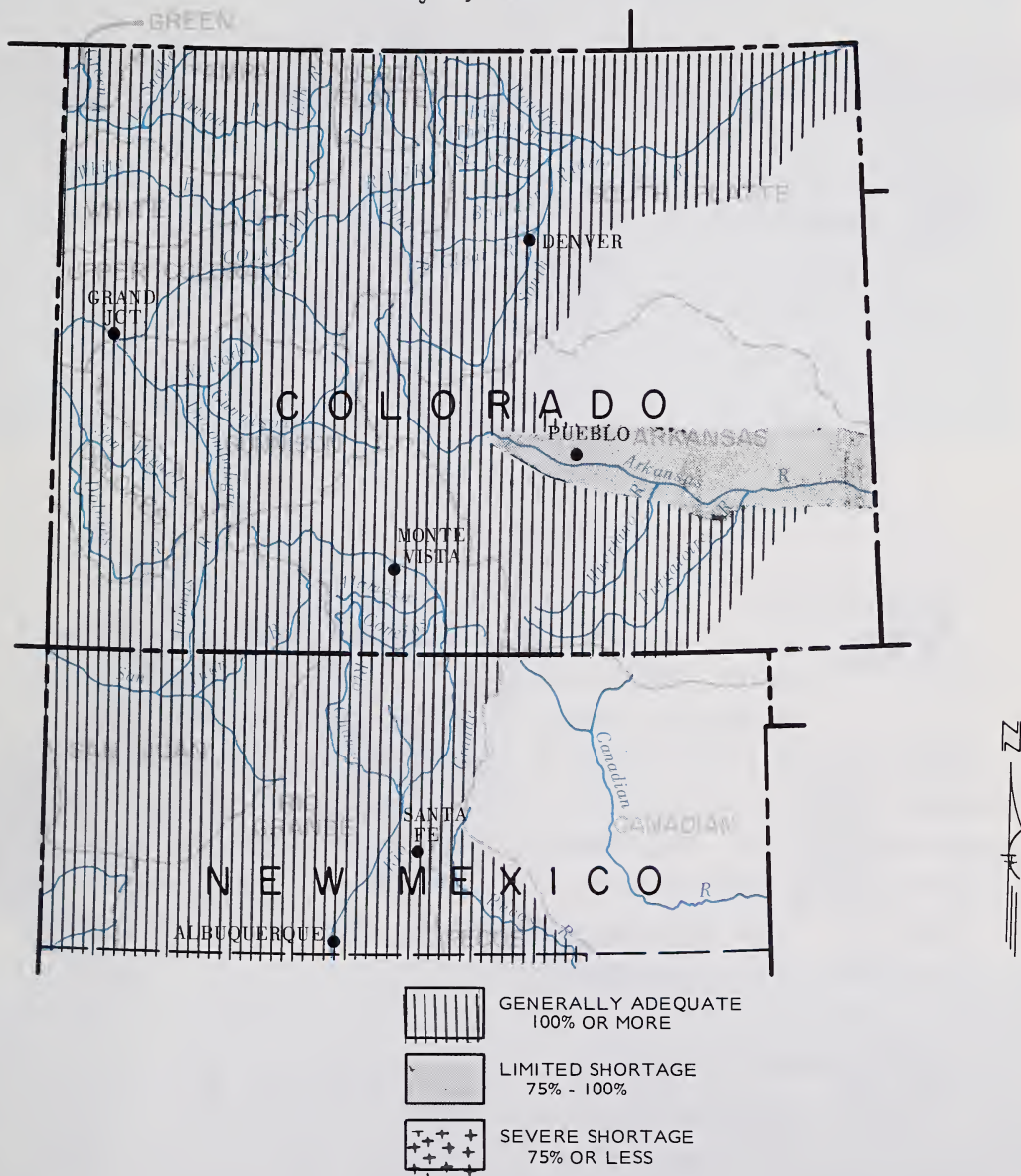
WATERSHED I	- SOUTH PLATTE RIVER WATERSHED
	Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.
WATERSHED II	- ARKANSAS RIVER WATERSHED
	Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.
WATERSHED III	- RIO GRANDE WATERSHED (COLORADO)
	Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.
WATERSHED IV	- RIO GRANDE WATERSHED (NEW MEXICO)
	Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.
WATERSHED V	- DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED
	Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.
WATERSHED VI	- GUNNISON RIVER WATERSHED
	Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.
WATERSHED VII	- COLORADO RIVER WATERSHED
	Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.
WATERSHED VIII	- YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED
	Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.
WATERSHED IX	- LOWER SOUTH PLATTE RIVER WATERSHED
	Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.
APPENDIX I	- SNOW SURVEY MEASUREMENTS
APPENDIX II	- SOIL MOISTURE MEASUREMENTS



# WATER SUPPLY OUTLOOK

as of

May 1, 1968



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.



## WATER SUPPLY CONDITIONS

as of

May 1, 1968

WATER USERS IN BOTH COLORADO AND NEW MEXICO SHOULD HAVE ADEQUATE WATER THIS SUMMER. ALL STREAMFLOW FORECASTS ARE NORMAL OR ABOVE EXCEPT ON THE ARKANSAS IN COLORADO. FORECASTS ON THIS BASIN ARE ONLY SLIGHTLY BELOW NORMAL. CARRY-OVER STORAGE IS ALSO LOW IN THIS DRAINAGE. SNOWFALL WAS ABOVE NORMAL DURING APRIL, BUT THE COOL WEATHER HAS RETARDED RUNOFF.

GENERALLY, VALLEY SOILS ARE IN GOOD CONDITION WITH ONLY SMALL AREAS INDICATING FAIR MOISTURE. MOUNTAIN SOILS ARE WET.



- TO OFFSET THE LOW SNOWFALL IN MARCH, APRIL WAS A WET MONTH. SNOWFALL OVER THE STATE WAS ABOVE NORMAL. THERE HAS BEEN NO MATERIAL INCREASE IN RUNOFF DUE TO THE COOL WEATHER. SOME AREAS NOW HAVE A NEAR MAXIMUM OF SNOW FOR MAY FIRST. CARRY-OVER STORAGE IS EXCELLENT ON THE SOUTH PLATTE, POOR ON THE ARKANSAS AND NEAR NORMAL IN THE REST OF THE STATE. SOIL MOISTURE IN THE MOUNTAIN AREAS IS NORMAL OR ABOVE AND WILL HELP MAINTAIN SUMMER FLOWS. VALLEY SOILS ARE GENERALLY IN GOOD CONDITION. THERE SHOULD BE NO MAJOR WATER SHORTAGES IN THE STATE THIS SUMMER IF RAINFALL IS AT LEAST NORMAL.



- SNOW SURVEYS ARE NOT MADE IN NEW MEXICO ON MAY FIRST, EXCEPT IN A FEW ISOLATED HIGH ELEVATION COURSES. SURVEYS MADE IN COLORADO INDICATE ABOVE NORMAL SNOWFALL DURING APRIL. STREAMFLOW FORECASTS IN NEW MEXICO WERE INCREASED SLIGHTLY. NO SERIOUS WATER SHORTAGES ARE EXPECTED IN AREAS DEPENDENT ON DIRECT STREAMFLOW. RESERVOIR STORAGE IS BELOW NORMAL AND AREAS DEPENDENT UPON THESE MAY HAVE SOME SHORTAGE. VALLEY SOILS ARE REPORTED IN FAIR TO GOOD CONDITION. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

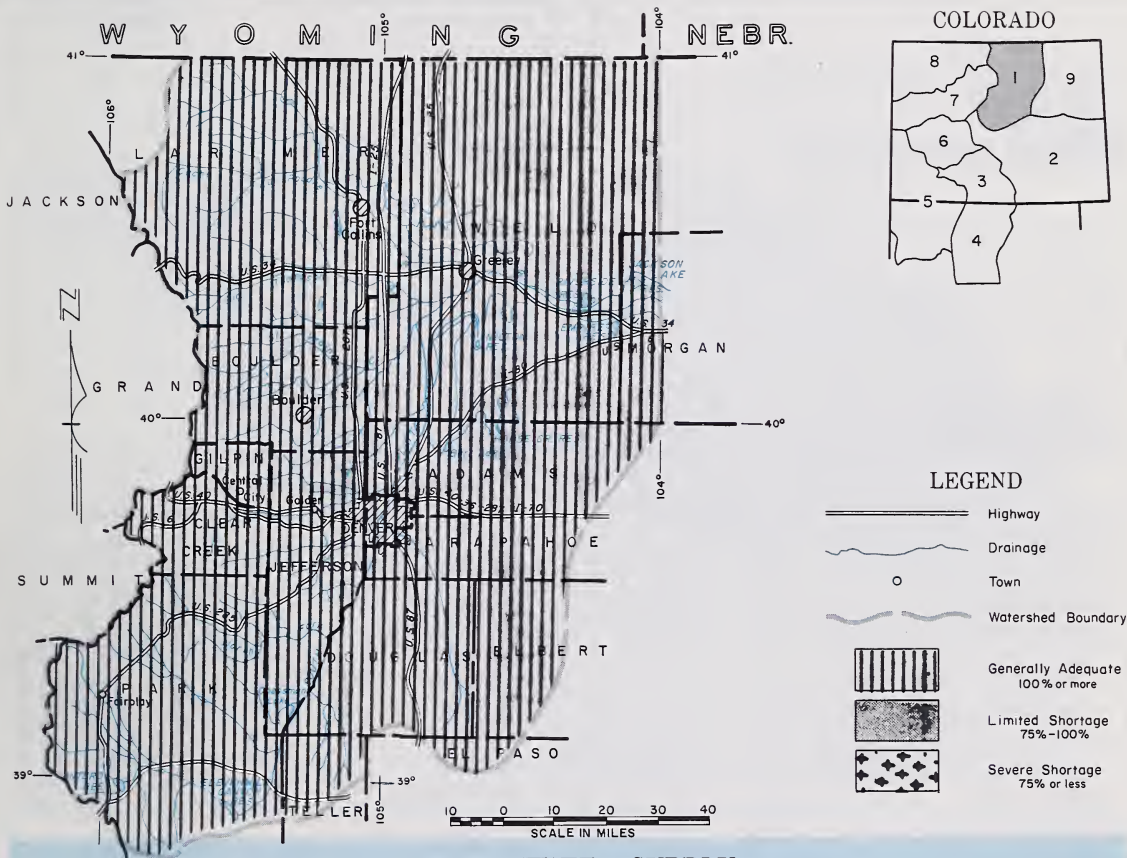


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

STREAMFLOW FORECASTS FOR THE ENTIRE BASIN ARE FOR NEAR AVERAGE AMOUNTS. SNOW STORMS DURING APRIL WERE VERY BENEFICIAL TO WATER USERS IN THE SOUTH PLATTE AREA. THEY INCREASED THE MOUNTAIN SNOW PACK MATERIALLY AND ALSO DEPOSITED MUCH NEEDED MOISTURE THROUGHOUT THE VALLEY AREAS. RESERVOIR STORAGE CONTINUES TO BE EXCELLENT, AND IS CURRENTLY 138 PERCENT OF AVERAGE. WATER USERS UNDER A RESERVOIR SYSTEM ARE ASSURED AN ADEQUATE SUPPLY.

This report prepared by

JACK N. WASHICHEK and DON W. McANDREW  
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Issued by

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DENVER, COLORADO DENVER, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORECAST	THIS YEAR AVE.	
		1948-49	1949-50
Big Thompson at Drake (2)	105	95	110
Boulder at Orodell	54	100	54
Cache La Poudre at Canyon Mouth (1)	183	100	183
Clear Creek at Golden (3)	140	104	134
Saint Vrain at Lyons	82	103	80

(1) Observed flow minus trans-basin diversions.

(2) Observed flow plus by-pass to power plants.

(3) Observed flow minus diversions through Jones Pass.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Boulder	2	200	116
Big Thompson	5	116	99
Cache La Poudre	7	130	120
Clear Creek	4	111	91
Saint Vrain	3	179	90
South Platte	3	136	116

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Antero	33.0	15.9	14.5	13.4
Barr Lake	32.2	28.8	15.7	24.7
Black Hollow	8.0	3.4	3.3	3.8
Boyd Lake	44.0	42.8	28.5	20.8
Cache La Poudre	9.5	8.9	8.3	7.7
Carter Lake	108.9	102.1	95.7	79.0
Chambers Lake	8.8	3.7	3.2	2.8
Cheeseman	79.0	51.9	31.8	54.8
Cobb Lake	34.3	19.9	0.0	9.2
Eleven Mile	97.8	93.9	90.9	74.6
Fossil Creek	11.6	9.3	8.0	7.1
Gross	43.1	24.6	19.0	- -

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Bear Creek	Good	Fair
Coal Creek	Good	Good
Deer Creek	Good	Fair
No. Fork of So. Platte	Fair	Fair
North Fork of Cache La Poudre	Good	Fair
Ralston Creek	Good	Good
Rock Creek	Good	Fair

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Boulder	1	111	91
Big Thompson	3	105	98
Cache La Poudre	2	87	74
Clear Creek	2	103	109
Saint Vrain	2	94	87
South Platte	2	90	82

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Halligan	6.4	6.4	6.4	3.9
Horsetooth	143.5	132.0	116.8	85.6
Lake Loveland	14.3	12.3	4.1	7.4
Lone Tree	9.2	9.0	5.4	7.9
Mariano	5.4	5.4	5.3	3.2
Marshall	10.3	7.0	2.1	4.4
Marston	18.0	16.8	15.9	15.2
Milton	24.4	18.1	6.9	12.5
Standley	42.0	26.5	9.8	12.6
Terry Lake	8.2	6.3	4.3	5.2
Union	12.7	12.1	6.8	8.2
Windsor	18.6	15.3	6.3	11.4

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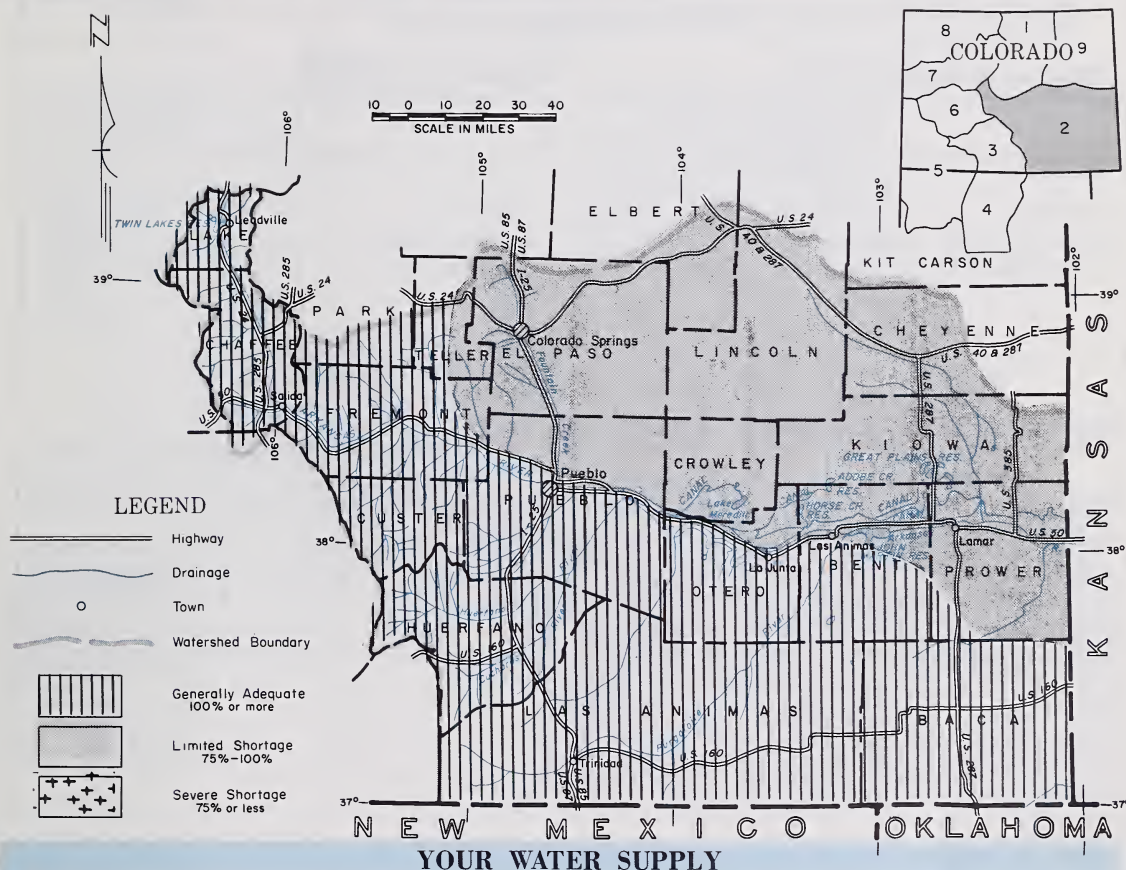


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



WATER SUPPLY PROSPECTS IMPROVED MATERIALLY DURING APRIL. SNOWFALL WAS ABOVE NORMAL OVER MUCH OF THE BASIN. STREAMFLOW FORECASTS WERE RAISED 13 PERCENT ON THE MAIN STEM OF THE ARKANSAS AND 20 PERCENT ON THE SOUTHERN TRIBUTARIES. VALLEY SOILS ON THE LOWER REACHES OF THE RIVER ARE REPORTED IN FAIR CONDITION, WHILE UP STREAM SOILS ARE IN GOOD SHAPE. RESERVOIR STORAGE IS BELOW NORMAL AND JOHN MARTIN IS EMPTY. SOME MINOR WATER SHORTAGES COULD OCCUR LATE IN THE SEASON.

This report prepared by

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FORT COLLINS, COLORADO

Issued by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO LA JUNTA, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Arkansas at Pueblo (4)	291	90	323
Arkansas at Salida (4)	310	90	345
Cucharas nr LaVeta	17	121	14
Purgatoire at Trinidad	55	122	45

(4) Observed flow plus change in Clear Creek, Twin Lakes, and Sugar Loaf Reservoirs minus diversions through Busk - Ivanhoe and Twin Lake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Arkansas	1	183	111
Cucharas and Purgatoire	2	500+	408

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Apishapa	Good	Fair
Fountain Creek	Good	Fair
Grape Creek	Good	Good
Hardscrable Creek	Good	Good
Huerfano	Good	Good
Monument Creek	Good	Good

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Arkansas	3	101	121
Cucharas and Purgatoire	1	102	101

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Adobe Creek	61.6	5.8	21.5	13.0
Clear Creek	11.4	8.4	6.8	4.7
Cucharas	40.0	0.0	0.1	5.3
Great Plains	150.0	50.5	71.8	44.4
Horse Creek	26.9	0.2	5.7	5.6

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
John Martin	366.6	0.0	136.9	64.6
Meredith	41.9	0.8	4.6	10.4
Model	15.0	1.5	-	2.2
Sugar Loaf	17.4	3.7	8.7	6.8
Twin Lakes	57.9	25.8	18.3	17.2

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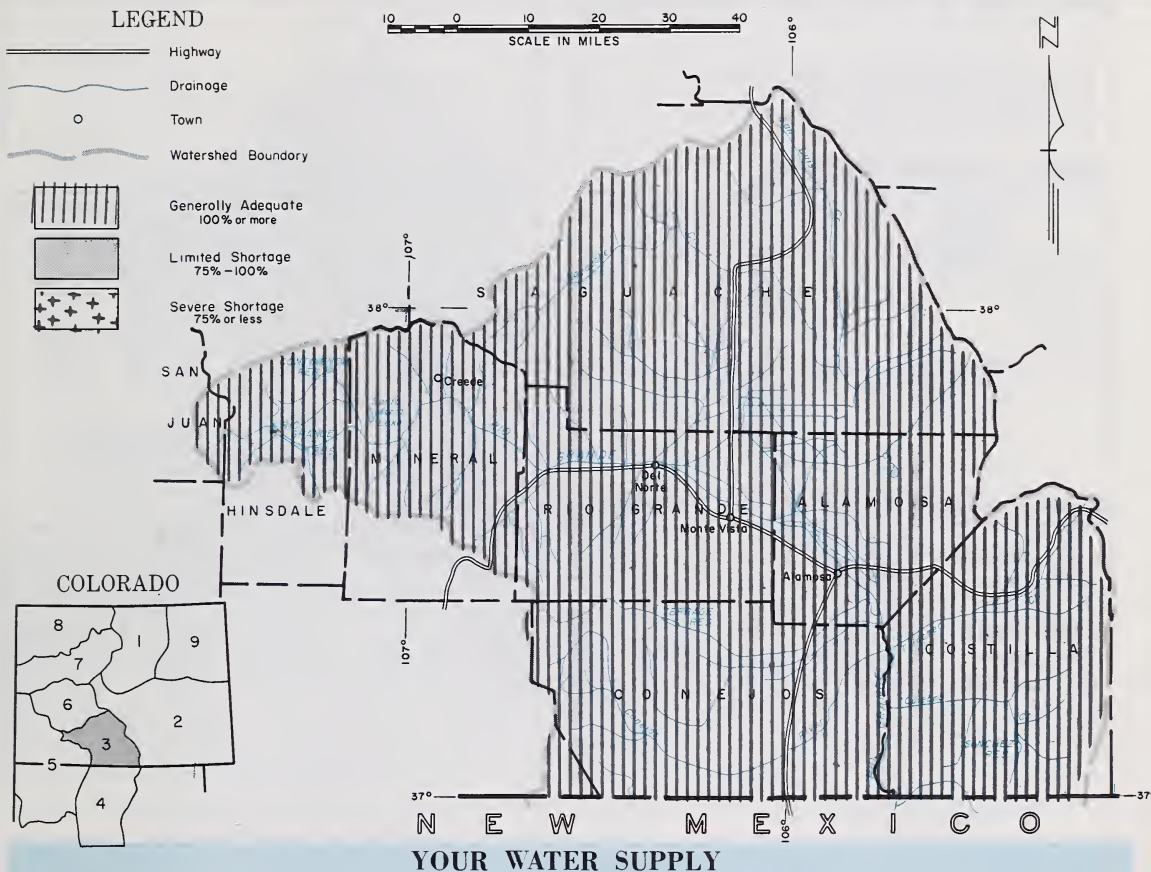
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
**COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO**



WATER USERS IN THE RIO GRANDE BASIN SHOULD HAVE ADEQUATE SUPPLIES THIS SUMMER. ALL STREAMFLOW FORECASTS WERE RAISED DUE TO ABOVE NORMAL SNOWFALL DURING APRIL. SOME OF THE LOW ELEVATION SNOW COURSES INDICATE MAXIMUM OF RECORD SNOW PACKS, HOWEVER, PRACTICALLY NO RUNOFF HAS OCCURRED. VALLEY SOILS ARE IN GOOD CONDITION AND MOUNTAIN SOILS CONTAIN NEAR NORMAL MOISTURE.

RESERVOIR STORAGE IS BELOW NORMAL.

*This report prepared by*

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FORT COLLINS, COLORADO

*Issued by*

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO OURANGO, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac.Ft.) Apr-Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Alamosa abv Terrace	75	110	68
Conejos nr Mogote	200	102	196
Culebra at San Luis (6)	25	119	21
Rio Grande at 30 Mile Bridge (5)	155	117	132
Rio Grande at Del Norte (5)	570	116	492
South Fork at South Fork	140	115	122

(5) Observed flow plus change in storage in Santa Maria,  
Rio Grande and Continental Reservoir.  
(6) Observed flow plus changes in storage in Sanchez  
Reservoir.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Alamosa	2	132	110
Conejos	3	154	166
Culebra	2	440	255
Rio Grande	10	187	152

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Saguache	Good	Good
Sangre de Cristo Creek	Good	Good
Trinchera Creek	Good	Good

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Alamosa	2	99	95
Conejos	1	100	91
Culebra	1	102	101
Rio Grande	3	104	104

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Continental	26.7	4.9	5.2	7.7
Platoro	60.0	4.0	3.0	- -
Rio Grande	45.8	10.6	10.3	14.8

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Sanchez	103.2	12.9	9.9	12.3
Santa Maria	45.0	3.4	3.6	7.8
Terrace	17.7	7.8	5.9	4.8

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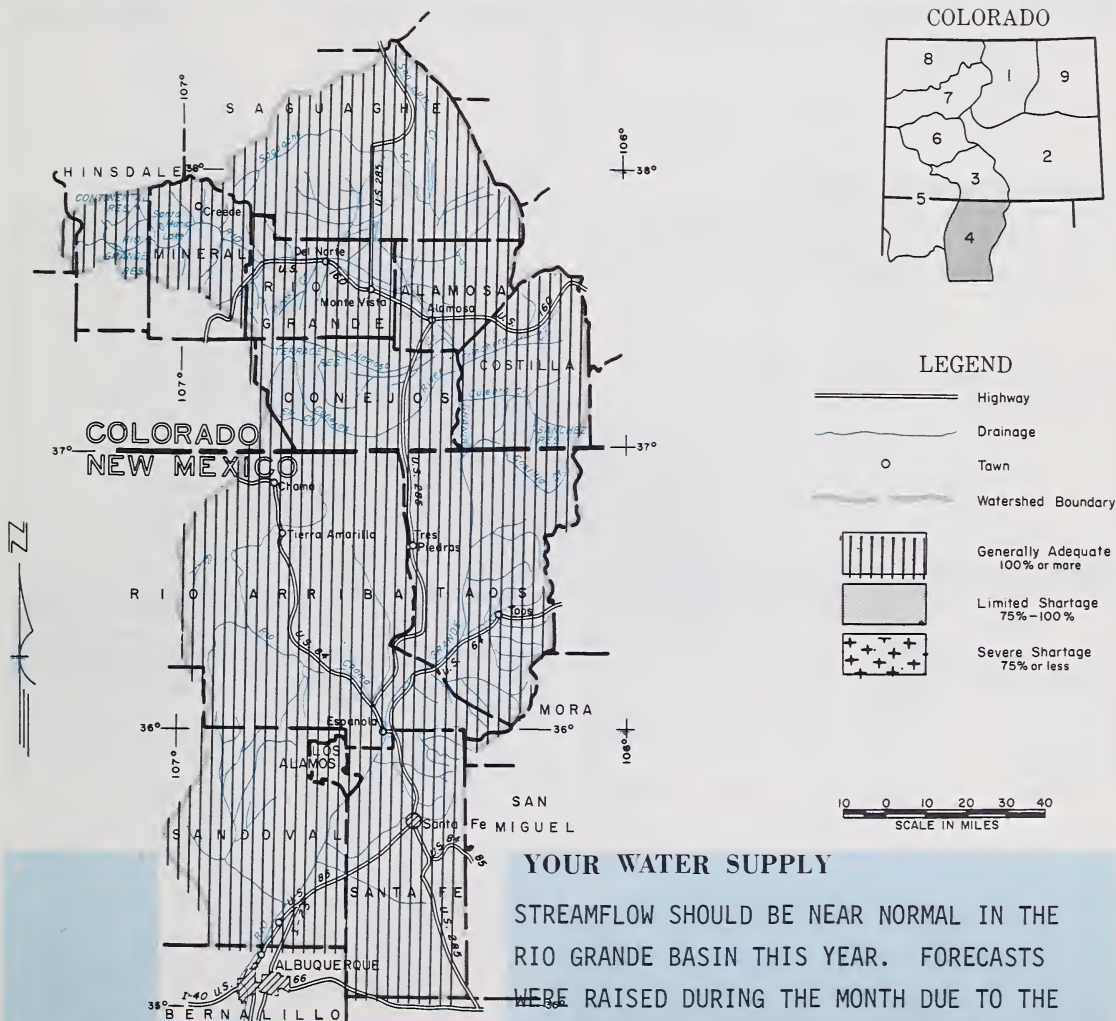


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
**COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO**



OCCURRED. STREAMFLOW REMAINS LOW. RESERVOIR STORAGE IS LOW AND WILL NOT PROVIDE A MAJOR SUPPLY THIS YEAR. VALLEY SOIL MOISTURE IS REPORTED AS FAIR TO GOOD. IF SHORTAGES OCCUR, THEY WILL BE IN THE LATE SEASON.

This report prepared by

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FORT COLLINS, COLORADO

Issued by

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*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.)

STREAM and STATION	FORECAST AS INDICATED	THIS YEAR % AVE.	15 YR. AVE.
			1948-62
Costilla at Costilla (8)	25AS	109	23
Pecos at Pecos	65AS	122	53
Rio Chama nr La Puente	220AS	103	214
Rio Grande at Otowi (7)	640MJ	105	609
Rio Grande at San Marcial (7)	460MJ	108	424
Rio Hondo nr Valdez	18AS	100	18
Red River at Questa	24AJ	104	23

The Forecast of the Rio Grande at San Marcial is  $\frac{1}{2}$ % of the Average used by the Elephant Butte Irrigation District.

A - S is April through September.

A - J is April through July.

M - J is March through July.

(7) Observed flow plus changes in storage in El Vado and Abiquiu Res.

(8) Observed flow plus changes in storage in Costilla Reservoir.

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	March May	June July
Embudo Creek	Good	Fair
Jemez River	Good	Fair
Mora River	Good	Fair
Nambe Creek	Good	Fair
Rio Ojo Caliente	Good	Fair
Rio Pueblo de Taos	Good	Fair
Santa Fe Creek	Good	Fair

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
No Snow Measurements scheduled this month.			

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
No Soil Moisture Measurements scheduled this month.			

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Alamogordo	122.1	44.4	69.0	63.8
Caballo	344.0	102.6	94.3	102.1
Conchas	280.3	171.1	164.5	229.5
Elephant Butte	2206.8	215.0	222.8	354.0

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
ElVado	194.5	7.0	13.6	55.7
McMillen-				
Avalon	37.0	14.0	5.3	10.6
Red Bluff (Tex)	307.0	89.6		59.1

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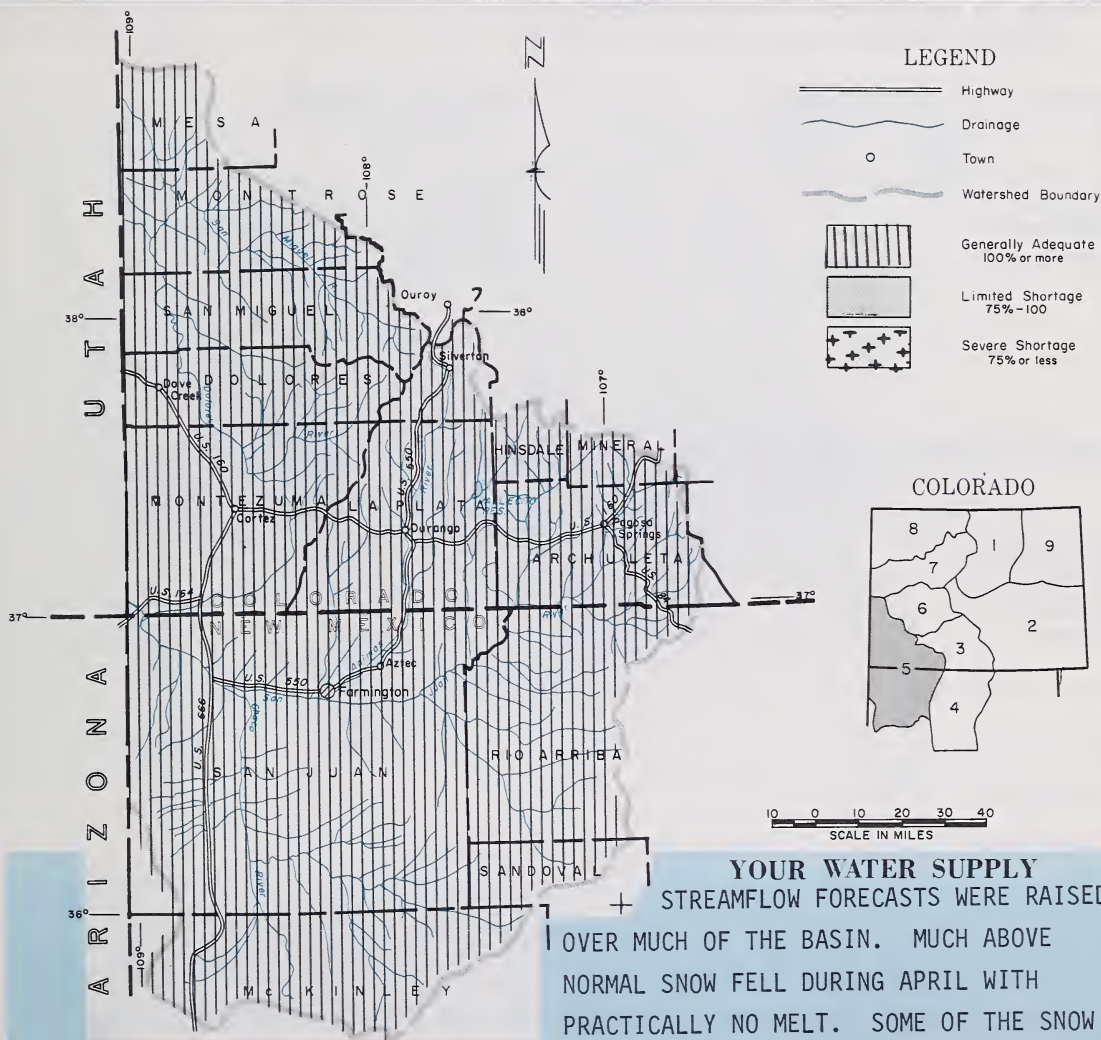
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER- SHEDS IN COLORADO AND NEW MEXICO

as of  
May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



COURSES ARE NOW INDICATING SNOW AT A MAXIMUM OF RECORD. THERE SHOULD BE NO WATER SHORTAGES IN THIS BASIN THIS SUMMER. SOIL MOISTURE IS BETTER THAN LAST YEAR AND MUCH BETTER THAN AVERAGE. THIS WILL INCREASE FLOWS SLIGHTLY. NAVAJO RESERVOIR NOW CONTAINS 601,000 a.f. COMPARED TO 379,000 a.f. LAST YEAR.

This report prepared by

JACK N. RASHCHIEK and DON W. McANDREH  
SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY  
FORT COLLINS, COLORADO

Issued by

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*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORECAST	THIS YEAR AVE. 1948-62	
		1948-62	1948-62
Animas at Durango	540	118	456
Dolores at Dolores	330	127	260
La Plata at Hesperus	31	115	27
Los Pinos at Bayfield (9)	205	96	213
Piedra Cr. at Piedra	195	107	182
San Juan at Carracs	475	121	393
Inflow to Navajo Res. (9)	750	108	693
(April-July)			
(9) Observed flow plus changes in storage in Vallecito Reservoir.			

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Animas	6	301	152
Dolores	4	626	188
San Juan	5	132	116

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Florida	Good	Good
Mancos	Good	Good
San Miguel	Good	Good

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Animas	3	104	127
Dolores	3	120	125
San Juan	2	98	113

# RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Groundhog	22	12.8	10.3	8.6
Navajo	1036	601.0	379.0	- -
Vallecito	126	48.5	56.0	50.9
Lemon	40	18.9	36.0	- -

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62

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May 1, 1968

## COLORADO



*This report prepared by*

JACK N. WASHICHEK and DON W. McANOREW  
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DENVER, COLORADO      GRAND JUNCTION, COLORADO

## *The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORECAST	THIS YEAR % AVE.		15 YR. AVE. 1948-62
		1948	1949	
Gunnison nr Grand Junction	1340	108	1308	
Surface Cr. nr Cedaridge	19	112	17	
Uncompahgre at Colona	170	122	139	

(9) Observed flow plus changes in storage in Vallecito Reservoir.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Gunnison	10	177	132
Surface Creek	3	116	118
Uncompahgre	3	250	160

# WATER SUPPLY OUTLOOK expressed "Poor, Fair, Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
No. Fork of Gunnison Taylor	Good Fair	Good Fair

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Gunnison	1	103	148
Surface Creek	1	96	---
Uncompahgre	1	96	127

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Blue Mesa	941.0	336.0	-	-
Taylor	106.2	51.0	51.8	60.3

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62

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
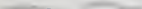





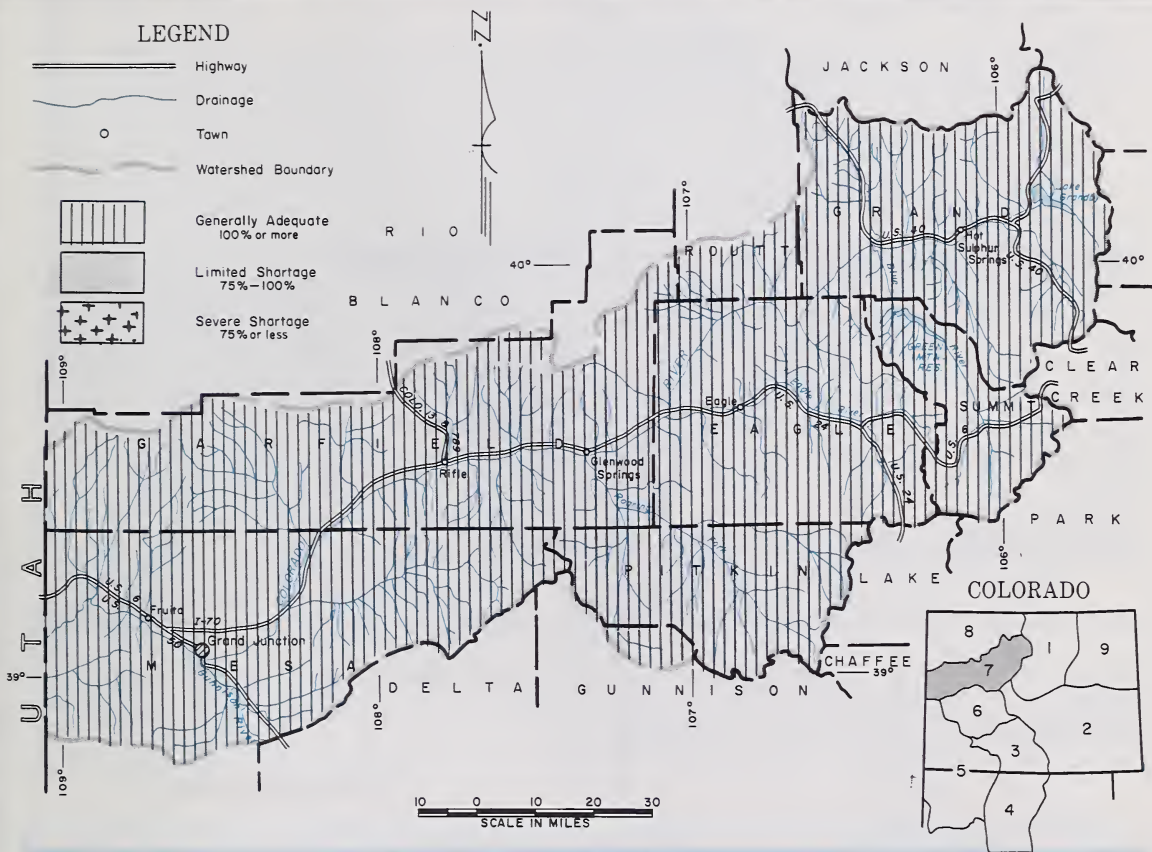
# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

## LEGEND

-  Highway
-  Drainage
-  Town
-  Watershed Boundary
-  Generally Adequate  
100% or more
-  Limited Shortage  
75%-100%
-  Severe Shortage  
75% or less



## YOUR WATER SUPPLY

ABOVE NORMAL WATER SUPPLIES CAN BE EXPECTED OVER MOST OF THE COLORADO RIVER MAIN STEM. CURRENT SNOW COVER IS ABOVE NORMAL AND MUCH ABOVE LAST YEAR AT THIS TIME. COOL WEATHER AND ABOVE AVERAGE SNOW DURING APRIL HAS INCREASED THE SNOW PACK MATERIALLY. PRACTICALLY NO SNOW MELT HAS TAKEN PLACE. FORECASTS RANGE FROM A LOW OF 91 PERCENT ON THE BLUE TO A HIGH OF 112 PERCENT ON THE ROARING FORK. MOUNTAIN SOILS ARE WET AND THIS CONDITION SHOULD BENEFIT GOOD STREAMFLOW.

*This report prepared by*  
JACK N. WASHICHEK and DON W. McANDREW  
SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY  
FORT COLLINS, COLORADO

*Issued by*  
F. A. MARK      R. L. PORTER      O. B. BEACH  
STATE CONSERVATIONIST      AREA CONSERVATIONIST      AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO      GLENWOOD SPRINGS, COLORADO      GRAND JUNCTION, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr-Sept

STREAM and STATION	FORECAST	THIS YEAR % AVE.	15 YR. AVE.
			1948-62
Blue Rv abv Green Mt. (10)	250	91	274
Colo Rv nr Granby (11)	250	107	233
Colo. Rv abv Glenwood Springs (12)	1660	102	1630
Roaring Fork at Glenwood Springs (14)	850	112	762
Williams Fk nr Parshall (15)	83	108	77
Willow abv Will. Cr. Res.	48	100	48
Colo. nr Cameo (12)	2600	117	2213

(10) Observed flow plus change in storage in Dillon Reservoir.

(11) Observed flow diversions by Adams Tunnel and Grand River Ditch plus change in storage in Granby Reservoir.

(12) Observed flow plus the changes as indicated in (11) plus Moffat Ditch.

(14) Observed flow plus diversion through Twin Lakes Tunnel.

(15) Observed flow plus diversions through Jones Pass Tunnel.

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Blue River	8	134	99
Colorado	20	135	119
Roaring Fork	6	148	129
Williams Fork	3	180	119
Willow	2	107	120
Plateau	3	92	90

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Brush Creek	Good	Fair
Eagle River	Good	Fair
Gypsum Creek	Good	Fair

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Blue River	1	96	100
Colorado	5	120	99
Roaring Fork	1	106	103
Willow	1	103	97

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Dillon	254.0	222.0	202.1	---
Granby	465.5	165.7	55.3	85.0
Green Mountain	146.9	49.2	39.0	46.9

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Williams Fork	96.8	21.2	5.9	---
Vega	32.9	4.2	8.1	---

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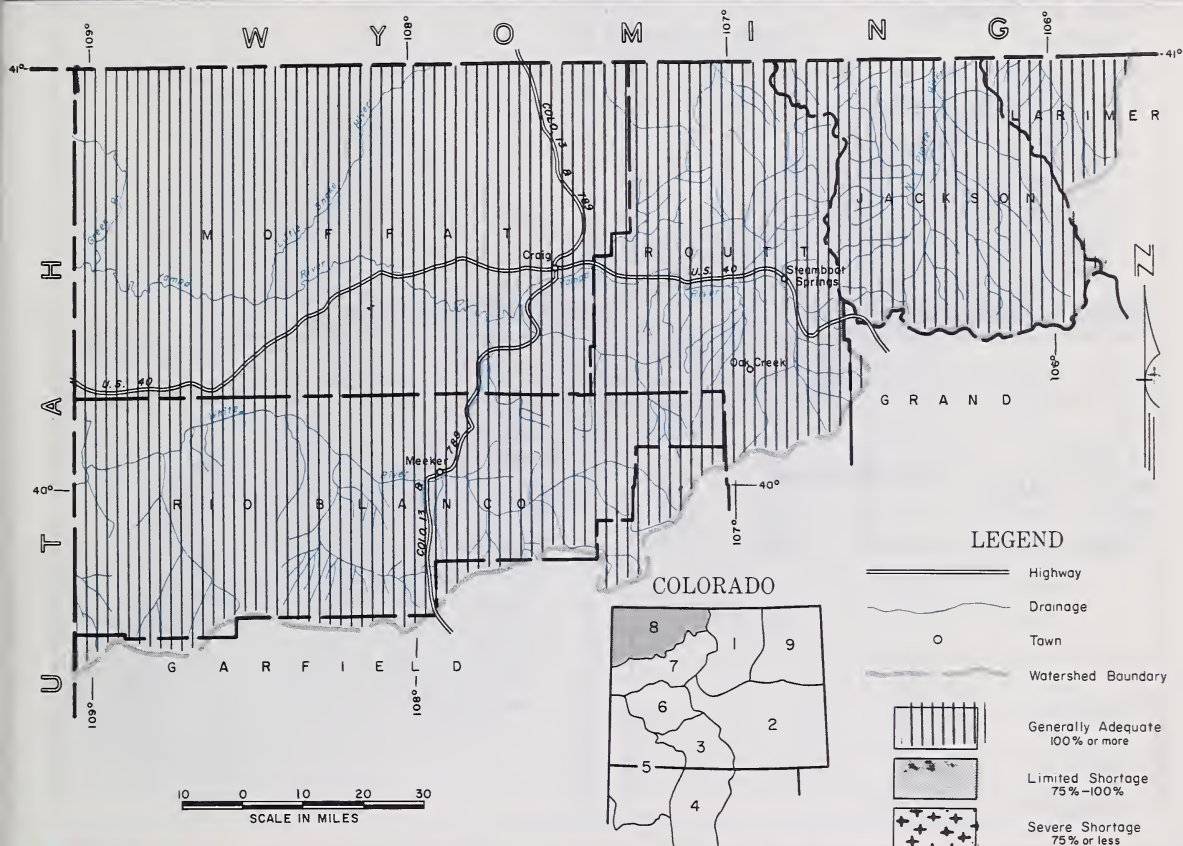
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of  
May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

WATER SUPPLIES IN THIS AREA SHOULD BE ADEQUATE THIS SUMMER. STREAMFLOWS ARE FORECAST ABOUT 110 PERCENT ABOVE THE 1948-62 AVERAGE. SNOW PACK IS ABOVE AVERAGE RANGING FROM 111 PERCENT ON THE LARAMIE RIVER TO 154 PERCENT ON THE ELK RIVER. THE WHITE AND YAMPA SNOW PACK IS CONSIDERABLY HIGHER THAN LAST YEAR. MOUNTAIN SOILS CONTAIN LESS THAN NORMAL MOISTURE. HOWEVER, SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE GOOD. WEATHER HAS BEEN COOL AND MOIST DURING MOST OF THE MONTH WITH A FEW WARM DAYS THE LAST WEEK.

*This report prepared by*

JACK N. WASHICHEK and DON W. McANDREW  
SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY  
FORT COLLINS, COLORADO

*Issued by*

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DENVER, COLORADO  
GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac. Ft.) Apr—Sept

STREAM and STATION	FORE CAST	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Elk at Clark	235	115	205
Laramie at Jelm	124	111	112
Little Snake at Lilly	345	107	321
No. Platte at Northgate	290	111	260
White at Meeker	370	111	332
Yampa at Maybell	1030	109	923
Yampa at Steamboat Springs	320	110	292

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
Canadian River	Good	Good
Hunt Creek	Good	Good
Illinois River	Good	Good
Michigan River	Good	Good
Oak Creek	Good	Good
Trout Creek	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Elk	1	126	154
Laramie	3	130	111
North Platte	5	119	122
White	2	238	146
Yampa	6	184	129

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Laramie	2	73	70
North Platte	2	81	83
Yampa	2	66	72

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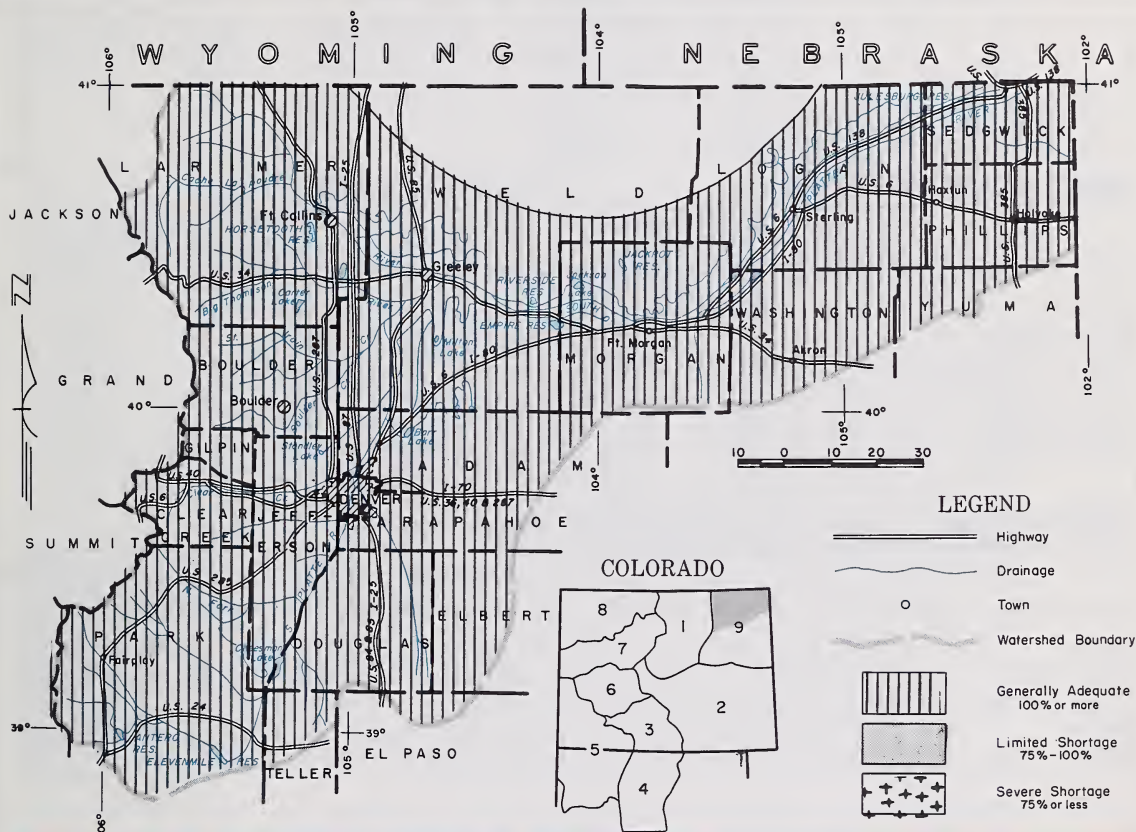


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1968

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

MID APRIL SNOW STORMS DEPOSITED MUCH NEEDED MOISTURE THROUGH THE BASIN. THE MOUNTAIN SNOW PACK NOW RANGES FROM 90 TO 120 PERCENT OF AVERAGE. THE SOIL MOISTURE CONDITIONS IN THE VALLEY AREAS IS ALSO GREATLY IMPROVED. STREAM-FLOW FORECASTS ARE NEAR AVERAGE FOR THE TRIBUTARY STREAMS IN THE UPPER BASIN. RESERVOIR STORAGE REMAINS EXCELLENT AND IS CURRENTLY 120 PERCENT OF NORMAL. WATER SUPPLIES IN THE LOWER SOUTH PLATTE DRAINAGE ARE FORECAST TO BE GENERALLY ADEQUATE THIS SUMMER.

This report prepared by

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Issued by

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DENVER, COLORADO  
STERLING, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1,000 Ac.Ft.) Apr-Sept

STREAM and STATION	FORECAST	THIS YEAR % AVE.	15 YR. AVE. 1948-62
Big Thompson at Drake (2)	105	95	110
Boulder at Orodell	54	100	54
Cache La Poudre at Canyon Mouth (1)	183	100	183
Clear Creek at Golden (3)	140	104	134
Saint Vrain at Lyons	82	103	80

(1) Observed flow minus trans-basin diversions.  
 (2) Observed flow plus by-pass to power plants.  
 (3) Observed flow minus diversions through Jones Pass.

# WATER SUPPLY OUTLOOK expressed "Poor,Fair,Good"

STREAM	FLOW PERIOD	
	April May	June Thru Sept.
South Platte from Greeley to Fort Morgan	Good	Good
South Platte from Fort Morgan to Sterling	Good	Good
South Platte below Sterling	Good	Good

## SUMMARY of SNOW MEASUREMENTS

RIVER	NUMBER of COURSES AVERAGED	THIS YEARS SNOW AS PERCENT OF	
		Last Year	Average
Boulder	2	200	116
Big Thompson	5	116	99
Cache La Poudre	7	130	120
Clear Creek	4	111	91
Saint Vrain	3	179	90
South Platte	3	136	116

## AVAILABLE SOIL MOISTURE

RIVER BASIN	NUMBER of STATIONS	THIS YEARS MOISTURE AS PERCENT OF	
		Last Year	Average
Boulder	1	111	91
Big Thompson	3	105	98
Cache La Poudre	2	87	74
Clear Creek	2	103	109
Saint Vrain	2	94	87
South Platte	2	90	82

## RESERVOIR STORAGE (1,000 Ac. Ft.) Measured First of Month

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Carter	108.9	102.1	95.7	74.0
Cheeseman	79.0	51.9	31.8	54.3
Eleven Mile	81.9	93.9	90.9	74.6
Empire	37.7	34.4	28.3	29.6
Horsetooth	143.5	132.0	116.8	85.6

RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	15 YEAR AVE. 1948-62
Jackson	35.4	34.4	33.8	34.2
Julesburg	28.2	22.4	21.7	22.0
Prewitt	32.8	25.6	6.3	21.7
Point of Rocks	70.0	69.5	65.4	61.6
Riverside	57.5	57.9	55.7	51.0

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# APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1968

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	LAST YEAR	AVG. 48-62
<b>NORTH PLATTE BASIN</b>					
<u>Laramie River</u>					
Deadman	5/2	59	20.9	17.1	18.1
McIntyre *	4/23	43	12.8	9.9	10.2
Roach	4/23	73	21.9	16.8	21.0
<u>North Platte River</u>					
Cameron Pass	4/26	85	32.9	33.9	28.1
Columbine Lodge	4/30	58	23.2	18.4	22.9
Northgate *	4/26	33	10.5	1.9	3.0
Park View	4/29	27	9.2	7.1	6.8
Willow Cr. Pass (B)	4/29	36	13.3	13.5	12.0
<b>SOUTH PLATTE BASIN</b>					
<u>Boulder Creek</u>					
Boulder Falls *	4/29	46	20.7	9.2	13.2
University Camp	4/29	60	23.8	14.1	24.9
<u>Big Thompson River</u>					
Deer Ridge *	4/27	17	5.1	0.5	3.5
Hidden Valley	4/27	39	11.5	10.6	13.6
Lake Irene (B)	4/28	69	24.7	21.8	24.7
Long's Peak *	4/27	45	14.4	12.1	13.4
Two Mile *	4/27	59	16.5	17.3	17.8
<u>Cache La Poudre</u>					
Bennett Creek	4/26	22	7.2	-	-
Big South	4/28	7	1.9	0.4	0.8
Cameron Pass	4/26	85	32.9	33.9	28.1
Chambers Lake	4/28	27	9.8	6.1	5.5
Deadman Hill	5/2	59	20.9	17.1	18.1
Hour Glass Lake	4/26	25	7.2	4.1	7.5
Joe Wright	4/26	83	29.5	26.6	-
Lost Lake *	4/28	36	12.3	7.7	10.2
Pine Creek	4/26	2	0.5	0.0	-
Red Feather *	4/26	31	8.8	0.0	4.9
<u>Clear Creek</u>					
Baltimore	4/30	22	7.4	0.0	-
Berthoud Falls *	4/30	38	11.4	7.2	13.8
Empire *	4/29	30	8.2	8.4	7.1
Grizzly Peak (B)	4/29	60	19.4	18.4	21.1
Loveland Lift	4/30	76	27.2	27.5	-
Loveland Pass	4/30	43	13.7	13.7	16.4
<u>Saint Vrain River</u>					
Copeland Lake *	4/30	7	2.5	0.0	2.3
Ward *	4/30	23	7.3	4.1	6.0
Wild Basin	4/30	36	11.1	7.6	14.8
<u>South Platte River</u>					
Como	4/29	23	7.9	2.1	-
Geneva Park *	5/1	8	2.2	2.1	1.9
Horseshoe Mt.	4/29	35	10.6	6.0	-
Hoosier Pass	4/29	40	14.6	11.6	12.9
Jefferson Creek	4/29	30	9.7	5.8	8.0
Mosquito	4/29	23	7.9	1.1	-
Trout Creek Pass	4/29	5	1.5	0.0	-
<b>ARKANSAS BASIN</b>					
<u>Arkansas River</u>					
Bigelow Divide	4/29	47	12.1	0.0	-
Cooper Hill (B)	4/30	47	12.9	12.6	-
East Fork *	4/29	25	9.2	5.2	8.0
Four Mile Park	4/29	10	2.5	0.0	1.0
Fremont Pass	4/29	59	19.8	19.5	19.5
Garfield	4/30	38	14.2	1.5	-
Monarch Pass	4/30	52	17.9	6.8	18.4
Tennessee Pass	4/29	36	10.5	2.7	8.5
Twin Lakes Tunnel	4/29	35	10.3	8.8	9.1
Westcliffe *	4/29	23	8.7	0.0	1.1

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	LAST YEAR	AVG. 48-62
<u>Cucharas River</u>					
Blue Lakes	NS	--	-	0.0	-
Cucharas Pass	4/26	28	12.3	0.0	-
LaVeta Pass (B)	4/26	20	8.9	0.0	1.7
<u>Purgatorie River</u>					
Burbon	4/26	30	9.9	0.0	2.9
<b>RIO GRANDE BASIN-Colo</b>					
<u>Alamosa River</u>					
Silver Lakes	4/30	6	2.0	0.0	0.5
Summitville	4/24	67	21.0	17.4	20.5
<u>Conejos River</u>					
Cumbers	4/25	50	21.6	14.4	12.5
Platoro *	4/25	46	16.8	11.5	10.9
River Springs	4/27	5	1.6	0.0	0.7
<u>Culebra River</u>					
Brown Cabin	4/30	5	2.0	0.0	-
Cottonwood (B)	NS	--	-	0.0	-
Culebra	4/30	24	8.7	0.4	5.2
LaVeta Pass (B)	4/26	20	8.9	0.0	1.7
Trinchera (B)	4/29	29	10.1	0.0	-
<u>Rio Grande</u>					
Cochetopa Pass *	4/24	26	7.8	0.0	2.7
Grayback	4/24	55	14.7	NS	-
Hiway *	4/29	78	29.5	25.4	27.8
Lake Humphreys *	4/29	17	6.0	0.0	0.2
Love Lake	4/26	32	11.4	0.0	-
Pass Creek *	4/29	28	12.6	0.0	3.3
Pool Table *	4/29	25	7.6	0.0	1.9
Porcupine *	4/26	35	10.9	2.5	6.8
Santa Maria	4/29	12	4.0	0.0	0.5
Upper Rio Grande	4/24	22	9.6	0.0	2.3
Wolf Cr. Pass	4/29	72	31.6	24.5	24.7
Wolf Cr. Summit	4/29	91	33.2	29.3	30.2
<b>SAN JUAN-DOLORES BASIN</b>					
<u>Animas River</u>					
Cascade	4/26	29	11.7	0.0	3.0
Lemon	4/29	13	6.2	-	-
Mineral Creek *	4/26	58	21.9	0.0	12.1
Molas Lake *	4/26	40	14.2	0.0	7.8
Red Mountain *	4/26	101	40.0	25.0	31.4
Purgatoire	4/29	60	24.6	-	-
Silverton Sub-Sta.	4/26	9	2.1	0.0	1.0
Spud Mountain *	4/26	70	29.4	14.6	23.8
<u>Dolores River</u>					
Lizzard Head	4/29	61	25.2	6.3	13.7
Lone Cone	4/30	39	15.7	2.6	-
Rico	4/29	Trace	-	0.0	1.0
Telluride	4/29	11	5.0	0.0	0.7
Trout Lake *	4/29	47	17.4	1.3	9.9
<u>San Juan River</u>					
Chama Divide (B)	4/25	0	0.0	0.0	-
Chamita (B)	4/25	5	1.7	0.0	-
Upper San Juan	4/29	77	34.2	21.0	30.2
Wolf Cr. Pass (B)	4/29	72	31.6	24.5	24.7
Wolf Cr. Summit	4/29	91	33.2	29.3	30.2

NOTE: \* - 1948-62 (ADJUSTED AVERAGES)

NS - NO SURVEY

(43) - AIR OBSERVED

(19) - ON ADJACENT DRAINAGE



# APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1968

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 48-52
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/29	71	28.9	24.4	23.0
Black Mesa	NS	--	-	NS	--
Blue Mesa *	4/30	17	6.5	0.0	2.3
Butte	4/26	55	17.9	0.0	--
Cochetopa Pass*(B)	4/24	26	7.8	0.0	2.7
Crested Butte	4/25	35	12.0	0.0	7.5
Keystone	4/25	56	20.9	12.5	--
Lake City	4/30	26	9.1	0.0	3.5
Long Draw	NS	--	-	NS	--
Mesa Lakes (B)	4/29	56	21.6	13.7	15.9
McClure Pass *	4/26	44	15.9	7.4	10.1
Park Cone	4/26	30	8.5	4.2	8.7
Park Reservoir	4/26	74	26.7	27.5	25.5
Porphyry Creek	4/30	53	17.1	9.9	17.7
Tomichi	4/30	33	13.0	2.2	--
Surface Creek					
Alexander Lake	4/29	71	28.9	24.4	23.0
Mesa Lakes (B)	4/29	58	20.6	13.7	15.9
Park Reservoir	4/26	74	26.7	27.5	25.5
Uncompahgre River					
Ironton Park	4/30	44	17.7	0.0	7.1
Red Mountain Pass*	4/26	101	40.0	25.0	31.4
Telluride (B)	4/29	11	5.0	0.0	0.7
COLORADO BASIN (Main)					
Blue River					
Blue River *	4/28	27	7.5	1.1	8.0
Fremont Pass	4/29	59	19.8	19.5	19.5
Frisco *	4/29	18	6.2	1.2	5.6
Grizzly Peak	4/29	60	19.4	18.4	21.1
Hoosier Pass (B)	4/29	40	14.6	11.6	12.9
Shrine Pass	4/29	58	19.5	18.9	20.2
Snake River *	4/29	13	5.1	0.0	5.1
Summit Ranch	4/25	19	5.4	2.2	6.1
Colorado River					
Arrow	4/29	37	14.2	10.9	9.1
Berthoud Pass	4/26	58	18.3	16.2	15.7
Berthoud Summit *	4/30	65	20.5	18.1	21.6
Cooper Hill	4/30	47	12.9	12.6	--
Fiddler Gulch	4/26	57	16.4	11.9	17.0
Glen Mar Ranch	4/26	19	6.3	0.4	4.8
Gore Pass *	4/25	33	10.5	5.7	7.9
Grand Lake *	4/29	21	8.0	4.8	3.7
Lake Irene	4/28	69	24.7	21.8	24.7
Lapland	4/24	24	7.1	6.7	9.3
Lulu	4/28	63	22.1	19.2	19.8
Lynx Pass	4/25	44	14.4	7.4	7.8
McKenzie Gulch	4/29	9	3.0	0.0	--
Middle Fork	4/26	28	8.5	3.1	6.4
Milner *	4/28	43	16.3	15.1	12.1
North Inlet	4/28	29	10.1	6.5	6.7
Pando *	4/29	26	9.4	6.3	8.3
Phantom Valley	4/29	31	12.6	8.4	7.0
Ranch Creek *	4/29	35	10.5	9.4	9.6
Tennessee Pass	4/29	36	10.5	2.7	8.5
Vail Pass *	4/29	48	17.7	14.2	16.3
Vasquez	4/29	43	15.0	12.9	14.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 48-52
<u>Roaring Fork River</u>					
Aspen	4/28	66	20.6	16.1	-
Chapman	4/26	44	13.5	8.5	-
Independence Pass	4/29	52	18.4	17.0	17.6
Ivanhoe	4/29	58	19.2	18.5	19.2
Kiln	4/29	33	10.7	2.2	-
Last Chance	4/26	40	11.9	10.8	-
Lift *	4/28	68	22.3	18.2	17.8
McClure Pass *	4/26	44	15.9	7.4	10.1
Nast	4/26	14	4.3	0.0	1.7
North Lost Trail	4/29	36	15.6	3.4	8.0
<u>Williams Fork River</u>					
Glen Mar Ranch	4/26	19	6.3	0.4	4.8
Jones Pass *	4/26	57	18.4	15.0	16.9
Middle Fork	4/26	28	8.6	3.1	6.4
<u>Willow Creek</u>					
Granby *	4/26	15	5.1	3.7	3.3
Willow Cr. Pass	4/29	36	13.3	13.5	12.0
<u>Plateau Creek</u>					
Mesa Lakes	4/29	58	20.6	13.7	15.9
Park Reservoir	4/26	74	26.7	27.5	25.5
Trickle Divide	4/26	85	30.9	27.7	28.8
YAMPA BASIN					
<u>Elk River</u>					
Clark	4/26	27	10.2	2.8	-
Elk River	4/26	62	20.5	16.3	13.4
Hahn's Peak	4/26	46	16.2	8.3	-
<u>White River</u>					
Burro Mountain	4/27	60	22.8	11.1	15.8
Rio Blanco	4/26	44	15.8	5.1	10.5
<u>Yampa River</u>					
Bear River *	4/29	39	13.0	6.0	8.3
Columbine Lodge(B)	4/30	58	23.2	18.4	22.9
Dry Lake	4/26	61	24.1	14.2	17.2
Lynx Pass (B)	4/25	44	14.4	7.4	7.8
Rabbit Ears	4/30	82	30.5	19.9	27.9
Yampa View	4/30	40	16.2	0.0	9.7

NOTE: \* = 1948-52 (ADJUSTED AVERAGES)

NS = NO SURVEY

(A) = AIR OBSERVED

(B) = ON ADJACENT DRAINAGE



# APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1968

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	4/30	11.1	6.1	9.3	8.5
Willow Pass	4/29	9.5	6.7	6.5	6.9
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	4/22	6.9	3.9	3.5	4.3
<u>Big Thompson River</u>					
Beaver Dam	4/22	7.3	5.1	4.8	4.7
Guard Station	4/27	6.9	3.9	4.9	4.7
Two Mile	4/22	9.1	5.7	4.3	5.6
<u>Clear Creek</u>					
Clear Creek	4/30	9.5	6.2	5.8	5.9
Hoop Creek	4/30	4.9	3.4	3.5	2.9
<u>Cache La Poudre River</u>					
Feather	4/23	10.1	5.5	6.5	8.1
Laramie Road	4/28	12.4	7.2	8.1	9.0
<u>South Platte River</u>					
Hoosier Pass	4/29	7.8	5.1	4.8	5.9
Kenosha Pass	4/29	4.4	2.8	4.0	3.7
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	4/30	6.7	6.4	6.1	4.3
Leadville	4/29	7.8	5.6	5.7	4.8
Twin Lakes Tunnel	4/29	4.5	2.8	2.9	3.1
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	4/25	10.7	8.2	8.2	9.0
<u>Rio Grande</u>					
Alberta Park	4/29	8.2	5.6	5.7	5.6
Bristol View	4/26	6.1	5.1	3.7	4.4
LaVeta Pass	4/30	11.9	11.9	11.7	11.8
ANIMAS-SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	4/26	9.1	8.4	8.6	6.8
Mineral Creek	4/26	5.7	5.2	5.4	4.1
Molas Lake	4/26	9.4	7.6	6.4	5.8
<u>Dolores River</u>					
Dolores	4/29	19.6	14.3	12.7	11.4
Lizzard Head	4/29	11.8	8.1	7.6	8.5
Rico	4/29	13.8	13.8	9.7	9.0
GUNNISON BASIN					
<u>Gunnison River</u>					
King	4/30	3.3	3.1	3.0	2.1
COLORADO BASIN (MAINSTEM)					
<u>Blue River</u>					
Blue River	4/28	4.2	2.7	2.8	2.7
<u>Colorado River</u>					
Berthoud Pass	4/26	3.9	2.5	3.2	2.8
Gore	4/25	4.9	4.5	4.9	4.4
Grand Mesa	4/29	12.5	8.6	9.0	-
Ranch Creek	4/29	8.7	5.7	4.9	6.5
Vail	4/29	12.3	11.7	9.0	11.0
Vasquez Siphon	Out of Order	11.0	-	9.4	9.2
<u>Roaring Fork River</u>					
Placita	4/25	9.3	8.3	7.8	8.1
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	4/26	19.0	10.5	13.3	-

ALL PROFILES 4 FEET DEEP







# LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

## STATE

Colorado State Engineer  
New Mexico State Engineer  
Nebraska State Engineer  
Colorado Experiment Station  
Rocky Mountain Forest and Range Experiment Station

## FEDERAL

Department of Agriculture  
Forest Service  
Soil Conservation Service

Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

Department of Commerce  
Weather Bureau

War Department  
Army Engineer Corps  
Atomic Energy Commission

## INVESTOR OWNED UTILITIES

Colorado Public Service Company  
Public Service Company of New Mexico

## MUNICIPALITIES

City of Denver                      City of Greeley  
City of Boulder                      City of Fort Collins

## WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association  
Colorado River Water Conservation District

## IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company  
San Luis Valley Irrigation District  
Santa Maria Reservoir Company  
Costilla Land Company  
Uncompahgre Valley Water Users' Association  
Twin Lakes Reservoir and Canal Company  
Trinchera Irrigation Co.



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